

I. IN THE CLAIMS

1. (previously amended) A method of load balancing in an upstream proxy, the method comprising:

receiving, at a control node, information from a plurality of downstream proxies the information including a delay time between the control node and the downstream proxies;

maintaining a list of downstream proxies; and

assigning a weight to each of the downstream proxies in the list, the weight based upon the information including the delay time received from the downstream proxies.

2. (original) The method of claim 1 further comprising receiving a request and using the weights to assign a proxy.

3. (previously amended) The method of claim 1 wherein the information includes a traffic load on a particular downstream proxy.

4. (previously amended) The method of claim 1 wherein the information includes a number of requests in responses of each of the downstream proxies.

5. (previously amended) The method of claim 3 wherein a load for a particular downstream proxy is determined by querying the processes of the downstream proxy.

6. (currently amended) A control node comprising a computer readable medium for load balancing, the control node comprising:

means for receiving information from a plurality of downstream proxies, the information including a delay time between the control node and the downstream proxies;

means for maintaining a list of the plurality of downstream proxies; and

means for assigning a weight to each of the downstream proxies in the list, the weight based upon the information received from the downstream proxies.

7. (currently amended) The control node system of claim 6 further comprising:

means for receiving a request; and

means for using the weights to assign a proxy.

8. (previously amended) A system for providing load balancing, the system comprising:

a plurality of proxies; and

a control node coupled to the plurality of proxies, the control node receiving information including a delay time between the control node and the downstream proxies from the plurality of proxies, maintaining a list of the plurality of proxies, and assigning a weight to each of the proxies in the list, the weight based upon the information received from the proxies.

9. (original) The system of claim 9 wherein the control node receives a request and uses the weights to assign a proxy to the request.

10. (previously amended) A method for assigning weights to a group of proxies, the method comprising the steps of:

sending, from a control node, a message to each of the proxies;
determining a response time for each of the messages sent to each of the proxies;
assigning a weight to each of the proxies based upon the response time of the message sent to the proxies;
receiving a message; and
assigning a proxy based upon the weight.

11. (previously presented) A method for assigning weights to a group of proxies, the method comprising the steps of:

sending a message to each of the proxies requesting the proxy to send information indicative of the load of the proxy;
receiving information at a control node indicating the load of each of the proxies;
assigning a weight to each of the proxies based upon the response time of the message sent to the proxies;
receiving a message; and
assigning a proxy to the message based upon the weights of the proxies.

12. (original) The method of claim 11 wherein the message sent to the proxies is an INVITE message.

13. (previously amended) A system for load balancing, the system comprising:
a plurality of proxies;
a control node coupled to the plurality of proxies, the control node receiving messages

from users on a network, the control node including a table of weights, each of the weights associated with one of the plurality of proxies, the weights determined by information including a delay time between the control node and the proxies received by the control node from the proxies; and

a location server coupled to the control node, the location server directing the messages received by the control node to the proxies.

14. (original) The system of claim 13 wherein the proxies implement the SIP protocol.

15. (cancelled without prejudice) A system of claim 13 wherein the information received by the control node from the proxies indicates a time delay.

16. (previously amended) The system of claim 13 wherein the information received by the control node further includes a loading of the proxies.

17. (previously amended) The system of claim 13 wherein the system includes a plurality of records.

18. (currently amended) A ~~computer program~~ computer readable medium for load balancing, comprising:

first code for receiving information from a plurality of downstream proxies;

second code for maintaining a list of downstream proxies at a control node; and

third code for assigning a weight to each of the downstream proxies in the list, the weight based upon information including a delay time between the control node and the proxies, received from the downstream proxies.

19. (previously amended) A computer readable medium having stored therein instructions for causing a processing unit to execute the following method:

receiving, at a control node, information from a plurality of downstream proxies the information including a delay time between the control node and the downstream proxies;

maintaining a list of the downstream proxies; and

assigning a weight to each of the downstream proxies in the list, the weight based upon the information received from the downstream proxies.

20. (new) The method of claim 1, wherein the proxies implement the SIP protocol.

21. (new) The control node of claim 6, wherein the proxies implement the SIP protocol.

22. (new) The system of claim 8, wherein the proxies implement the SIP protocol.

23. (new) The method of claim 10, wherein the proxies implement the SIP protocol.

24. (new) The computer program of claim 18, wherein the proxies implement the SIP protocol.

25. (new) The computer readable medium of claim 19, wherein the proxies implement the SIP protocol.